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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,456	01/27/2000	Masaaki Ogura	0557-4892-2	9891
22850	7590	10/22/2003	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PHAM, THIERRY L	
		ART UNIT		PAPER NUMBER
		2624		7
DATE MAILED: 10/22/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/492,456	OGURA ET AL.
	Examiner	Art Unit
	Thierry L Pham	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-51 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 17, 34, and 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitations recited in claims 17, 34, and 51 are unclear to the examiner (abnormal difference includes a case when a usage value obtained is a “prescribed number of times of an average value”); therefore, the limitations as recited are vague and indefinite.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-13, 18-30, 35-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6198542 to Tabata, and to U.S. Patent No. 6507409 to Kawaguchi.
2. Regarding claim 1, Tabata discloses an image-forming apparatus supervising system (network control system, col. 3, lines 39-44) comprising:

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(1) a usage information transmitting device (a computer is connected to the image forming apparatus wherein the image forming apparatus selected by the computer “transmits” display information towards the computer, Fig. 1) configured to transmit said usage information (number of copies produced, col. 8, lines 13-15) periodically from said at least one image-forming apparatus (i.e. printer & copy machine, col. 8, lines 6-8) to the central control apparatus (network control system, col. 3, line 31).

(2) an apparatus list generating device configured to generate an apparatus list indicating which of the at least one image-forming apparatuses (network control system recognizing a list of office automation, col. 6, lines 31-44 and Figure 5) and plurality of data communication apparatuses (i.e. printer & copy machine, col. 8, lines 6-8, since the applicants did not specify a specific data communication apparatus, therefore, the Examiner interprets printing apparatus as a communication apparatus because the printing apparatus is capable of transmitting and receiving data) having said usage information (number of copies produced, col. 8, lines 8-20).

(3) a first obtaining operation executing device (network control system for controlling and obtaining usage information, col. 3, lines 39-44) configured to execute a first obtaining operation for obtaining said usage information (number of copies produced, col. 8, lines 8-20) from said at least one image-forming apparatus, said usage information transmitted through the plurality of data communication apparatus (i.e. printer & copy machines, col. 8, lines 6-8, are communicating via the use of Local Area Network, col. 4, lines 66-67) after the apparatus list is generated.

However, Tabata does not disclose expressly an image-forming apparatus supervising system comprising: (1) a confirming device configured to confirm which of the plurality of data

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communication apparatuses and the at least one image-forming apparatus have not-yet-obtained usage information, by comparing, after the first obtaining operation is executed, a list of the image-forming apparatuses which transmitted with the apparatus list; (2) a not-yet-obtained list generating device configured to generate a not-yet-obtained list indicating which of plurality of data communication and the at least one image-forming apparatus have said not-yet-obtained usage information; (3) a second obtaining operation executing device configured to execute a second obtaining operation for obtaining said usage information from the at least one image-forming apparatus and the plurality of data communication apparatuses with said not-yet-obtained usage information by accessing the at least one image-forming apparatus and the plurality of data communication apparatuses based on the not-yet-obtained list generated by the not-yet-obtained list generating device.

Kawaguchi discloses a method for controlling information relating to the state of use in a printing apparatus comprising:

(1) a confirming device (a command to confirm the number of passed sheets, abstract) configured to confirm which of the plurality of data communication apparatuses and the at least one image-forming apparatus (printing apparatus, col. 7, lines 64-67, since applicants fail to specify a specific means for data communication, therefore, printing apparatus is interpreted as a data communication by the Examiner) have not-yet-obtained usage information (number of passed sheets cannot be obtained while printing operation is in progress, col. 8, lines 25-36), by comparing, after the first obtaining operation is executed, a list of the image-forming apparatuses which transmitted with the apparatus list (comparison between the information of use and

reference information amount of used sheets as equivalent to usage information, col. 3, lines 5-15);

(2) a not-yet-obtained list generating device configured to generate a not-yet-obtained list indicating which of plurality of data communication and the at least one image-forming apparatus have said not-yet-obtained usage information (not-yet-obtained list can be performed via the host computer, col. 8, lines 25-45);

(3) a second obtaining operation executing device configured to execute a second obtaining operation (a command to determine number of passed sheets may be determined at any time regardless of first and/or second obtaining operation, col. 8, lines 25-36) for obtaining said usage information from the at least one image-forming apparatus (col. 3, line 37) and the plurality of data communication apparatuses (printing apparatuses, col. 8, line 63) with said not-yet-obtained usage information by accessing the at least one image-forming apparatus and the plurality of data communication apparatuses based on the not-yet-obtained list generated by the not-yet-obtained list generating device.

Tabata and Kawaguchi are combinable because they are from the same field of endeavor for supervising/monitoring of printing apparatuses. At the time of the invention, it would have been obvious to one of ordinary skill in the art to add "not-yet-obtained" list of apparatuses with respect to usage information (number of printed sheets) as per teachings of Kawaguchi to the invention of Tabata. The suggestion/motivation for doing so would have been: (1) to estimate respective times of replenishment of consumable supplies such as ink, recording sheets, (2) to minimize unnecessary use of space and advance expenditure for storing surplus consumable

supplies, col. 8, lines 2-17 of Kawaguchi. Therefore, it would have been obvious to combine Kawaguchi with Tabata to obtain the invention as specified in claim 1.

3. Regarding claim 2, Kawaguchi further discloses an image forming apparatus supervising system wherein said usage information transmitting device is provided in the data communication apparatus (Local Area Network, Fig. 1, col. 4, line 66).

4. Regarding claim 3, Tabata further discloses an image forming apparatus supervising system wherein said apparatus list generating device is provided in the central control apparatus (network control system capable of recognizing a list of office automation, col. 3, lines 39-44).

5. Regarding claim 4, Tabata further discloses an image forming apparatus supervising system wherein said usage information includes a total number of images formed sheets (number of copies produced, col. 8, lines 13-15).

6. Regarding claim 5, Kawaguchi further discloses an image forming apparatus supervising system wherein said first obtaining operation executing device is provided in the central control apparatus (host computer, col. 8, lines 37-46).

7. Regarding claim 6, Kawaguchi further discloses an image forming apparatus supervising system wherein said confirming device is provided in the central control apparatus (host computer, col. 7, lines 27-33).

8. Regarding claim 7, Kawaguchi further discloses an image forming apparatus supervising system wherein said not-yet-obtained list generating device is provided in the central control apparatus (host computer, col. 8, lines 25-40).

9. Regarding claim 8, Kawaguchi further discloses an image forming apparatus supervising system wherein said second obtaining operation executing device is provided in the central control apparatus (host computer, col. 8, lines 25-40). Kawaguchi's invention capable of determines the usage information at any given time, regardless of first and/or second operation (col. 8, lines 25-36).

10. Regarding claim 9, Kawaguchi further discloses an image forming apparatus supervising system wherein said usage information transmitting device transmits said usage information by generating a self-call (a printing apparatus automatically notifying the user of information relating to the state of use of the recording apparatus, Abstract and col. 6, lines 23-35) and when the data communication apparatus is accessed by the central control apparatus (Figure 8 includes a printing apparatus (data communication) connected to the host computer).

11. Regarding claim 10, Kawaguchi further discloses an image forming apparatus supervising system wherein said usage information transmitting device transmits at a predetermined time (transmitting the number of used sheets and an average number of used sheets during a predetermined time period, Abstract and col. 2, lines 32-45) and information of

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said predetermined time is stored in central control apparatus (an average number of sheets used per month can be calculated and transmitted to the host computer, col. 5, lines 55-65). An example of 60 recording sheets have been printed in "three months as equivalent to predetermined time", the average number of recording sheets used per month is 20, col. 5, lines 59-62. It is known in the art the "predetermined time" can be stored on any storage medium, including central control apparatus.

12. Regarding claim 11: Claim 11 is rejected as the same basis/rationale as described in claim 1 above.

13. Regarding claim 12, Tabata further discloses an image-forming apparatus supervising system wherein said central control apparatus includes a usage information obtaining-impossible-list generating device (Figure 5 includes Presence/Absence of Failure category for impossible listing of apparatuses, col. 8, lines 20-30 and col. 10, lines 26-30) configured to generate a usage information obtaining-impossible-list indicating that at least one data communication or image-forming apparatus (printing apparatus) has said not-yet-obtained usage information even though a predetermined number times of the second obtaining operations have been executed by the second obtaining operation executing device.

14. Regarding claim 13, Tabata further discloses an image-forming apparatus supervising system wherein a display of the central control apparatus (network control system, abstract) displays information of said obtaining-impossible-list (Figure 5, col. 8, lines 20-30).

15. Regarding claims 18-30: Claims 18-30 are rejected for the same basis/rationale as described in claims 1-13 above (respectively) as per teachings by Tabata and Kawaguchi. Claims 18-30 are the "means" claims corresponding to the system claims 1-17 (respectively). The above cited-passages also teach claims 18-30.

16. Regarding claims 35-47: Claims 35-47 are rejected for the same basis/rationale as described in claims 1-13 above (respectively) as per teachings by Tabata and Kawaguchi. Claims 35-47 are the "method" claims corresponding to the system claims 1-13 (respectively). The above cited-passages also teach claims 35-47.

17. Claims 14, 31, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata and Kawaguchi as applied to claim 1 above, and further in view of U.S. Patent No. 5887216 to Motoyama.

18. Regarding claim 14, the combinations of Kawaguchi and Tabata do not disclose expressly an image-forming apparatus supervising system wherein the central control apparatus transmits obtaining-impossible-list to at least one of a sales person and a service person in charge of the image-forming apparatus having said not-yet-obtained usage information.

Motoyama discloses an image-forming apparatus supervising system, wherein the central control apparatus (computer workstations, col. 4, lines 23-24) transmits obtaining-impossible-list to at least one of a sales person and a service person in charge of the image-forming apparatus

having said not-yet-obtained usage information (it is yet another object of the invention to communicate an indication of a problem in the business office device to a diagnostic service center, preferably by a connectionless-mode of communication, col. 2, lines 36-39).

Tabata, Kawaguchi, and Motoyama are combinable because they are from the same field of endeavor for image-forming apparatus supervising system. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Tabata and Kawagushi's supervising system by the teachings of Motoyama. The suggestion/motivation for doing so is to allow the diagnostic service to correct the problems remotely (Motoyama, col. 3, lines 17-22); thereby, to reduce time and cost. Therefore, it would have been obvious to combine Motoyama with Tabata and Kawaguchi to obtain the invention as specified in the claim 14.

19. Regarding claim 31: Claim 31 is rejected for the same basis/rationale as described in claims 14 above as per teachings by Tabata, Kawaguchi, and Motorama. Claim 31 is the “means” claim corresponding to the system claim 14. The above cited-passages also teach claim 31.

20. Regarding claim 48: Claim 48 is rejected for the same basis/rationale as described in claims 14 above as per teachings by Tabata, Kawaguchi, and Motorama. Claim 48 is the “method” claim corresponding to the system claim 14. The above cited-passages also teach claim 48.

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21. Claims 15-17, 32-34, 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata and Kawaguchi as applied to claim 1 above, and to U.S. Patent No. 5933675 to Sawada et al (hereafter Sawada), and further in view of Chihara (U.S. 6208428).

22. Regarding claim 15, the combinations of Tabata and Kawaguchi do not disclose an image-forming apparatus supervising system further comprising a bill-submitting-device configured to submit a bill based on a difference in usage information obtained between a preceding and current number of image-formed sheets.

Sawada discloses an image-forming apparatus supervising system (central control system, abstract) comprising a bill-submitting-device configured to submit a bill based on usage information, i.e., number of sheets printed (a billing amount is calculated in accordance with the counter value of the total counter and the calculation formula, and a bill is issued, col. 15, lines 20-24).

The combinations of Tabata, Kawaguchi, and Sawada do not disclose expressly a bill based on a “difference in usage information obtained between a preceding and current number of image-formed sheets”.

Chihara discloses an image-forming apparatus supervising system, wherein a bill based on a “difference in usage information obtained between a preceding and current number of image-formed sheets” (the charging log producing program reads out the total print number information, decides a difference between the total print number information and the total print number information read out before the printing is started, col. 4, lines 55-65). Tabata,

Kawaguchi, Sawada, and Chihara are combinable because they are from the same field of endeavor for image-forming apparatus supervising system.

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Kawaguchi and Tabata's image-forming apparatus supervising system by the teachings of Sawada and Chihara. The suggestion/motivation for doing so is to prevent unnecessary purchase of consumable supplies to reduce cost and to minimize storage space (col. 8, lines 5-17 of Kawaguchi). An additional motivation for doing so is to improve the operating efficiencies of a printer in a network environment (col. 2, lines 32-36 of Chihira). Therefore, it would have been obvious to combine Tabata and Kawaguchi with Sawada and Chihara to obtain the invention as specified in claim 15.

23. Regarding claims 16-17, it would have been obvious to one of ordinary skill in the art not to submit a bill if the difference is abnormal (i.e. if no printing is performed, and the total count of printed sheets is zero, therefore, it is not necessary to submit a bill based on the usage information; thereby, to reduce time and save cost).

24. Regarding claims 32-34: Claims 32-34 are rejected for the same basis/rationale as described in claims 15-17 above (respectively) as per teachings by Tabata, Kawaguchi, Sawada, and Chihara. Claims 32-34 are the "means" claims corresponding to the system claims 15-17 (respectively). The above cited-passages also teach claims 32-34.

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25. Regarding claims 49-51: Claims 49-51 are rejected for the same basis/rationale as described in claims 15-17 above (respectively) as per teachings by Tabata, Kawaguchi, Sawada, and Chihira. Claims 49-51 are the "method" claims corresponding to the system claims 15-17 (respectively). The above cited-passages also teach claims 49-51.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. 5673190 to Kahleck et al.

U.S. 5715496 to Sawada et al.

U.S. 6415392 to Suzuki et al.

U.S. 5752125 to Yamashita et al.

U.S. 5802429 to Yamashita.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897. The examiner can normally be reached on M-F (8:30 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

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Thierry L. Pham



Sept. 30, 2003



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